

ABSTRACT OF THE DISCLOSURE

The present invention is a method for representation of sign in an encoding scheme. An embodiment of the present invention provides a variable bit length binary representation of the absolute value of integer data and then appends a single bit representing the sign of the original integer data. According to one embodiment, the present invention uses the trailing sign bit to specify the sign of the integer being coded. This scheme is much simpler to encode and decode than other schemes that use sign representations for variable-length bit sequences, especially for data that is roughly symmetric about zero, or can be efficiently mapped to this rough symmetry. In another embodiment, if the present invention is used on data sets where there is a most frequently occurring value, the locations of the most frequently recurring value are exhaustively cataloged through some other means, and the variable-length codes are modified to remove the representation of this value. Since the most recurring value is not encoded and decoded individually, the size of the data to be transferred is further reduced.